

BEFORE THE
POLLUTION CONTROL HEARINGS BOARD
STATE OF WASHINGTON

IN THE MATTER OF GROUND WATER
APPLICATION NOS. 11966,
G3-20719, G3-22907, G3-22905
and G3-22892

FRANK P. SHINN, JR. and
HARRY MASTO,

Appellants,

v.

STATE OF WASHINGTON,
DEPARTMENT OF ECOLOGY; JETT-
AERO, INC.; FORT WRIGHT COLLEGE
OF THE HOLY NAMES; ROBERT A.
BURNS; ROBERT R. BURNS; HENRY
F. SCHELL and V. NORMAN BISCHOFF,

Respondents.

PCHB Nos. 711, 728, 729, 730 and 759

FINAL FINDINGS OF FACT,
CONCLUSIONS OF LAW AND ORDER

Formal hearings on the above-numbered appeals came on regularly
before Board Chairman, Chris Smith, in Spokane, Washington on July 10
and 11, 1975. David Akana, Hearing Examiner, presided.

In each of the appeals: The sole appellant is either Frank P.
Shinn, Jr. or Harry Masto, both of whom appeared by and through their

1 attorney, John Moberg; the Department of Ecology is in each case one
2 of the respondents and it appeared by and through Wick Dufford, Assistant
3 Attorney General.

4 One other respondent is involved in each of the appeals and was
5 represented at the hearing in the following manner:

6	<u>PCHB No.</u>	<u>Respondent</u>	<u>Appearance by</u>
7	711	Jett-Aero, Inc.	Ray L. Greenwood, Attorney, and Lawrence L. Tracy, Attorney
8	728	Ft. Wright College of the Holy Names (Holy Names)	Sister Monica Ann Taylor
9	729	Robert A. Burns and Robert R. Burns	John E. Wagenblast, Attorney
10	730	Henry F. Schell	Laurence Libsack, Attorney
11	759	V. Norman Bishoff	Milton Sackmann, Attorney and Lawrence L. Tracy, Attorney

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15 The Board had previously heard and taken extensive testimony in
16 the appeal of PCHB Cause Nos. 613 and 648, et al. In those cases the
17 issues of fact and law are essentially the same as in these cases now
18 before the Board. Accordingly, as the result of the prehearing
19 conference and before the hearing in this matter, the appellants and
20 respondents stipulated that the prior testimony in PCHB Nos. 613 and 648,
21 et al. may be incorporated as part of the record of the present appeals;
22 and further that any party may present additional evidence at the time
23 of this hearing.

24 Having thus considered the transcript of the testimony and the
25 exhibits presented by the parties during the hearing of the instant
26 appeals and the transcript of the testimony and the exhibits adduced

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1 during the hearing of PCHB Nos. 613 and 648, et al., the contentions of
2 the parties and their post hearing briefs, exceptions having been
3 received and said exceptions having been granted in part and denied in
4 part, and being in all matters fully advised, this Board makes and
5 enters the following

6 FINDINGS OF FACT

7 I

8 Under the geographical area involved in this matter there are
9 prehistoric layers of permeable basalt rock to a depth of at least
10 4,500 feet formed by successive lava flows. The layers form pockets in
11 which ground water aquifers have formed. In 1943, with the construction
12 of Grand Coulee Dam, the Columbia Basin Project was formed to develop an
13 irrigation system for agricultural development.

14 The Columbia Basin Project never has provided irrigation canal
15 water to the geographical area involved in this matter. The easternmost
16 canal of the project, the East Low Canal, lies to the west of the instant
17 geographical area.

18 II.

19 The instant geographical area historically was known as one where
20 dry-land farming was practiced. But in the early 1960s, probably as a
21 result of commingling of irrigation water seepage from areas to the
22 west with natural water aquifers, the instant geographical area
23 experienced a rise in its water table.

24 Farmers found it financially feasible to drill for water and, thus,
25 increase their crop yields by sprinkler irrigation. Respondent's
26 predecessor agency issued 150 ground water well permits for irrigation

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1 and, by 1966, it was obvious, from a declining water table, that there
2 could be an overissue of water withdrawal permits.

3 III.

4 In response to the above-described situation, the Department
5 promulgated WAC 508-14-010 and -020 on May 15, 1967. These regulations
6 established certain management areas and interim rules under which
7 ground water applications would be banned, limited or granted pending a
8 study by the Department of the source, extent, depth, volume and flow
9 of the ground waters.

10 In 1968, pursuant to the above, the Department closed an area
11 (called the "Odessa Hold Area") of about 1,100 square miles lying east
12 of the East Low Canal and including the instant geographical area to the
13 granting of ground water withdrawals. The Department agreed to accept
14 applications on a priority time basis but announced it would not process
15 them until completion of the aforementioned study.

16 IV.

17 To provide a foundation for the Department's water management
18 program detailed studies were initiated by it to investigate water
19 measurement techniques, reasonable pump lifts, and to develop a functional
20 ground water model.

21 One part of the study, calculated to measure the level of water in
22 the aquifer and hence the availability of water for appropriation,
23 resulted in the completion in 1971 (by the United States Geological
24 Survey) of a mathematical model for the Odessa and other areas of the
25 Columbia Basin. The model enables a computer to produce ground water fl
26 and aquifer water level information when water is subtracted by pumping

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1 or added by recharge. Its results have been field measured and its
2 accuracy verified for the Odessa Sub-Area related to the instant appeals
3 as late as January and February, 1973. The model was based on the
4 accumulation of water data over four years ending in 1970.

5 Another phase of its study, was directed at gathering information
6 relating to the restraints of RCW 90.44.070, and was undertaken by the
7 State of Washington Water Research Center, the results of which were
8 embodied in October, 1971 in respondents' Exhibit 20 (PCHB 613) entitled
9 "Long-Run Costs and Policy Implications of Adjusting to a Declining Water
10 Supply in Eastern Washington". The purpose of the study was to develop
11 economic and cost data in order that the Department could determine a
12 "reasonable or feasible pumping lift in case of pumping developments"
3 (RCW 90.44.070).

14 As the result of the completion of such studies and based thereon
15 the Department adopted WAC 173-128 (establishing the Odessa Ground-Water
16 Management Sub-Area) on January 15, 1973 and WAC 173-130 (Odessa Ground-
17 Water Sub-Area Management Policy) on January 25, 1974, both of which
18 cover the geographical area of the instant appeals, and began to process
19 on a time priority basis, as filed, those ground water applications it
20 had been holding since 1968.

21 V.

22 The policy of the Department provides for a limited controlled rate
23 of decline of the water level in "Zone A", (which is the area of the
24 instant appeals) to a total amount of 30 feet in three years
25 (WAC 173-130-060) and to prevent the water table (static water level) from
6 descending more than 300 feet beneath the altitude of the static water

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1 level, as measured in 1967. (WAC 173-130-070) In 1967 the static water
2 level was 400 feet below the average ground level in the Sub-Area. Thus,
3 by the granting of additional water rights, and the appropriation thereof,
4 the water level (as that term is used in WAC 173-130-030(4)) will
5 ultimately be allowed by the Department to decline to 700 feet below
6 the earth's surface.

7 The point at which water is drawn into a pump is known as the
8 pumping level. This point must be submerged when the pump is drawing
9 water. The pumping level is always located below the surface of the water

10 Appellants are prior water appropriators and, as a result of the
11 issuance of new permits to others, will ultimately be required to
12 expend substantial sums of money for well and well appurtenance
13 improvements and additional operating costs to enable them to pursue an
14 appropriate the amounts of water to which they have a prior right.
15 However, the Department's regulations prevent junior appropriators
16 (respondents) from withdrawing ground water when the static water level
17 reaches the said 700 feet. On or before the time that the 700 foot
18 static water level is reached, appellants will be required to pump from
19 a point below that depth. But based upon respondents' Exhibit 20
20 (PCHB 613) and the testimony of Doctor Walter R. Butcher we find that
21 allowing the static water level to decline to 700 feet, at the maximum
22 rate of controlled decline of 30 feet in three years will not result
23 in an unreasonable pumping lift for the appellants.

24 As new permits are issued under such state policy, the waters which
25 have been stored in the aquifers will be depleted within 35 years, but
26 after the 700 foot level has been reached, and pumping by junior

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1 appropriators is curtailed, water will continue to seep into the aquifer
2 to provide a sustained yield of water for the foreseeable future for
3 those remaining senior appropriators.

4 VI.

5 The cost study received by respondents' Exhibit 20 (PCHB 613) was
6 based upon price-market data of a five year time period ending in 1971.
7 Since then both the prices which the farmer pays and at which he sells
8 his product have increased. The prices at which a farmer sells his
9 product are still valid and they constitute the latest presently avail-
10 able information on that subject.

11 VII.

12 Any new well which is developed and operating within one and one-half
13 miles of another existing well may have a drawdown effect on the water
14 table of an existing well and vice versa. The degree of drawdown is
15 dependent upon factors which include such things as transmissivity
16 (the ability of rock to allow water to move through it), well efficiency,
17 the rate at which water is removed, and the amount of water removed.

18 VIII.

19 Appellant Shinn, a well driller and irrigation systems specialist
20 with 26 years of experience in the Moses Lake area, owns 500 acres of
21 farmland serviced by three ground water wells upon which he has rights
22 prior in time to all respondents.

23 Appellant Masto, owns farmlands serviced by eight ground water wells
24 upon which he has rights prior in time to all respondents. In 1974,
25 during the height of the crop irrigation season, all of his wells
26 experienced a steadily declining amount of water production and for an

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1 unknown reason one of his wells failed to pump water for a period of
2 time. The cause of the lowering of the water production was the declining
3 water table level which has occurred in the area.

4 IX.

5 The Department granted respondents' respective applications for
6 wells since they were found by the Department to have water available
7 for a beneficial use and that they would not impair existing rights or
8 be detrimental to public welfare. Appellants contend the new wells of
9 respondents will adversely effect those of appellants by lowering the
10 pumping level to an unreasonable level.

11 X.

12 Appellants were unable to prove that the proposed wells of
13 respondents Jett-Aero, Holy Names, Schell, Bischoff, and Burns would
14 affect the water pumping level of the wells of either appellant.
15 The amount of water withdrawal contemplated by the combined permits of
16 respondents (10,300 gallons per minute; 4,178 acre-feet per year) will be
17 within the water table decline permitted by the provisions of WAC 173-130.
18 The cumulative effect of respondents' wells will be to reduce the static
19 water level of all wells, including appellants' wells.

20 XI.

21 The only evidence of the economic reasonableness of the pumping
22 'lift' which will be generally required as a result of the implementation
23 of respondent's policy and regulations is contained in respondents'
24 Exhibit 20 (PCHB 613). However, as that exhibit relates, "what is
25 'feasible' or 'economic' or 'reasonable' to one water user may not apply
26 at all in another case." (page 102 of respondents' Exhibit 20)

1 Appellants failed to establish that the pumping lift, as to them,
2 would be unreasonable or not feasible.

3 XII.

4 The Department made an error in the computation of the available
5 water in the Sub-Area by inadvertently leaving out the annual withdrawal
6 of 117,000 acre-feet of water being pumped prior to January 1, 1974.
7 But this error was not shown to materially affect the permits on appeal
8 in these matters. Appellants also did not show that the effect of the
9 admitted error would cause the water table to decline in excess of that
10 permitted by WAC 173-130. The Department recognizes that certain areas
11 will have to be withdrawn, but again, it is of no concern in these
12 matters.

13 XIII.

14 Any Conclusion of Law hereinafter stated which is deemed to be a
15 Finding of Fact is hereby adopted as such.

16 From these Findings the Pollution Control Hearings Board comes
17 to these

18 CONCLUSIONS OF LAW

19 I.

20 Appellants do not question that the water permits issued to
21 respondents are for a beneficial use. Rather, appellants attack the
22 issuance of permits to respondents on the ground that such appropriation
23 of water would impair existing rights or be detrimental to the public
24 welfare (see RCW 90.44.060 which governs ground water but adopts
25 provisions of RCW 90.03.290 relating to surface waters).

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1 II.

2 It is true that appellants' rights, whatever they may be, precede
3 those of respondents'. Thus, the relevant question is whether appellants'
4 existing certificated water rights will be impaired by the regulations of
5 the Department, i.e., WAC 173-130, and the issuance of permits to
6 respondents pursuant thereto, the effect of which will be to lower the
7 pumping level of appellants' wells.

8 We conclude that the existing rights of appellants will not be
9 impaired.

10 III.

11 None of the permits of respondents, individually or collectively,
12 nor WAC 173-130 violate RCW 90.44.070 which provides:

13 No permit shall be granted for the development or withdrawal
14 of public ground waters beyond the capacity of the underground
15 bed or formation in a given basin, district, or locality to
yield such water within a reasonable or feasible pumping lift
in case of pumping developments

16 We conclude that the Department's limited and controlled rate of
17 water level decline, as expressed in its rule and regulation, provides
18 generally for a reasonable or feasible pumping lift. We recognize that
19 economics must be given weight in construing the meaning to be given
20 to the statutory terms "reasonable", or "feasible". However, we have
21 found as a fact in Finding of Fact XI that appellants did not prove
22 facts which, as to them, might have established economic unreasonable-
23 ness. Even had they done so, we would nonetheless conclude that
24 RCW 90.44.060 must be interpreted as a prohibition only when the pumping
25 lift becomes unreasonable or not feasible as to "pumping developments"
26 generally.

1 With the world-wide shortage of food and the specter of hunger
2 becoming evermore acute, the public interest demands that underground
3 waters be utilized (and thus not wasted) in order to convert arid lands
4 into the production of food. That would result in a small step in the
5 fulfillment of *Isaiah 35:1: The desert shall rejoice and blossom as the*
6 *rose.*

7 Assuming but not concluding, that appellants have a property right
8 in the level of the water table, their remedy may be to seek damages
9 against the State of Washington.

10 IV.

11 The permits issued by respondent are consistent, and not in conflict,
12 with RCW 90.44.060, 90.44.070 and 90.44.130. Therefore the permits of
13 respondents should be upheld.

14 V.

15 The statutes and regulations are presumed not to violate either the
16 Washington State or United States Constitutions.

17 VI.

18 Any Finding of Fact which should be deemed a Conclusion of Law is
19 hereby adopted as such.

20 From these Conclusions the Pollution Control Hearings Board issues
21 this

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ORDER

The actions and findings of the Department and its issuance of the permits to respondent-permittees are affirmed.

DONE at Lacey, Washington, this 16th day of January, 1976.

POLLUTION CONTROL HEARINGS BOARD

Chris Smith
CHRIS SMITH, Chairman

Walt Woodward
WALT WOODWARD, Member

W. A. Gissberg
W. A. GISSBERG, Member

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